DOCUMENT RESUME

ED 385 768 CE 069 719

AUTHOR Wright, James D.; Carr, Rhoda
TITLE Effects of High School Work Experience a Decade Later: Evidence from the National Longitudinal Survey.
INSTITUTION Employment Policies Inst., Washington, DC.
PUB DATE Sep 95
NOTE 28p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Followup Studies; High Schools; *High School Students; *Income; *Outcomes of Education; Part Time Employment; *Student Employment; *Unemployment
IDENTIFIERS National Longitudinal Survey of Youth

ABSTRACT

Using a data sample from the National Longitudinal Survey of Youth that included all youths enrolled in high school who were aged 16-19 in 1979, a study tracked the youths' labor force attachment and earnings 12 years later. The study found that students who worked while in high school show increased rates of labor force participation along with lower rates of unemployment 12 years later. At the later date, of those with the heaviest work schedules while in school, 87 percent were employed and only 4 percent were unemployed (the rest were not in the labor force). Those with moderate work hours while in school had an 81 percent employment rate and 5 percent unemployment rate 12 years later, whereas of those with no work hours while in school 72 percent were employed and 7 percent were unemployed. In addition, those who had the heaviest work schedules while in high school had the highest earnings in the later study---attributable to more hours worked per year. The study also found that the teens who were most likely to work had higher family incomes, better-educated parents, and more often, two working parents in the home. When differences in family background were accounted for, the only potentially negative effect of in-school work is that those who worked, especially those who worked the most hours, tended to complete about 12 weeks less total education than did students who did not work while in school. The study concluded that the measured reduction in adult unemployment rates of those teens who worked speaks to the importance and value of the work they carried out. Their reduced unemployment rates, greater labor force attachment, and earnings gains all took place despite the fact that the typical employment opportunities were found in the service and retail sectors, jobs often maligned in discussions of the current economy. (Contains 22 references.) (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

EMPLOYMENT
POLICIES
INSTITUTE
FOUNDATION

ED 385 768

Effects of High School Work Experience a Decade Later: Evidence From The National Longitudinal Survey

James D. Wright
Tulane University

Rhoda Carr
Tulane University

September 1995

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

CE 068 717

Suite 1110, 607 14th Street, N.W. - Washington, D.C. 20005 - (202) 347-5178 - Fax: (202) 347-5250

The Employment Policies Institute Foundation is a non-profit research organization dedicated to studying public policy issues surrounding employment growth. In particular, EPIF research focuses on issues that affect entry-level employment. Among other issues, EPIF research has quantified the impact of new labor costs on job creation, explored the connection between entry-level employment and welfare reform, and analyzed the demographic distribution of mandated benefits. EPIF commissions non-partisan research which is conducted by independent economists at major universities around the country.

EXECUTIVE SUMMARY

Existing research on the effects of in-school employment has shown that such work has positive early effects on employment and earnings. This study extends that body of research and finds that the beneficial effects of in-school work, notably higher levels of labor force attachment and earnings, are readily measured even after a dozen years and that the negative effects often ascribed to in-school work are not supported by the actual work histories. This long term observation allows for measurement well after completion of college and well into established work patterns.

Employment and Earnings Patterns

Students who worked while in school show increased rates of labor force participation along with lower rates of unemployment. Of those with the heaviest work schedules while in school (as measured in weeks of employment per year), 87 percent were employed and only 4 percent unemployed 12 years later (the rest were not in the labor force). Those with moderate work hours had an 81 percent employment rate and 5 percent unemployment. In contrast, only 72 percent of those with no in-school work were employed and 7 percent were unemployed.

There were also substantial differences in income. About a third of those who did not work while in school were earning $20,000 or more a dozen years later, compared to more than half of those with heavy work schedules.

Which Teens Work?

The patterns of teen work belie the common notion that a dominant function of teenager employment is to assist lower-income families. In general, the higher the family income, the greater is the probability that a teen will work while in school. Particularly surprising given the differences in income between their households, students living with both of their parents were more likely to work than students from single-parent homes.

In-school employment also proved to be positively associated with parental education and occupation. Almost 80 percent of teens with college-educated fathers, compared to only about 60 percent of teens whose fathers had less than an eighth grade education, worked in the prior year. Similarly, three-quarters of the children of white collar workers worked, against only two-thirds of the children of blue-collar workers and only about half of the children of service workers. Moreover, not only were those students from more privileged backgrounds more likely to work, once working they were also more likely to work longer hours. In general, students with one or more working parents were more likely to be employed than students whose parents did not work.

The single potentially negative effect of in-school work is that these persons on average tended to complete about twelve weeks less total education — up to and including college attendance — than did students who did not work while in school. Nevertheless, the gains in labor force participation, employment, and income would appear to handsomely offset any losses due to the small educational decrement reported here.

Employment and Earnings Effects of Work

Controlling for the differences in the family and individual characteristics of teens who worked while in school separates the effects of family characteristics from that of the work itself. After controlling for the differences in youths — family background, race, and gender, among others — no support can be found for the fear that teen employment produces temporary earnings at the expense of lifetime earnings. After a dozen years, youths who had worked while in school showed no negative effects from that work, while those who had worked the most hours as teens actually had an increased probability of being employed. For this latter group, in-school work not only produced no negative effects, it translated into lower long-term unemployment rates.

Given the increased long-term probability of employment for some of these working teens, it is not surprising that the earnings of these workers followed the same pattern. Those who had worked moderate hours while teenagers showed annual earnings that were $1,300 higher because of that employment, while those who had worked the most hours showed an almost $1,600 increase in their average earnings. This increase in earnings is weighed against a slight reduction in educational attainment. Despite the positive association between earnings and education, these working youths were able to combine work with a modest reduction in educational attainment and yet not incur an earnings loss, rather reaping an earnings gain.

Conclusion

The measured reduction in adult unemployment rates of those teens who worked — measured after controlling for the socio-economic differences in these youth — speaks to the importance and value of the work they carried out. Their reduced unemployment rates, greater labor force attachment, and earnings gains all took place despite the fact that the typical employment opportunities were found in the service and retail sectors, jobs frequently maligned in the discussion over today's economy. Further, their increased earnings and stronger workforce attachment bodes well for the future of their children, for as we learned, parental work is an important influence on the behavior of children.

Clearly, not all youths have the same access to employment opportunities. It is in providing these opportunities that public policy has a central role to play. While public policy has often been focused on the search for "good" jobs, we can learn from the experience of these youths. Their reduced unemployment rates, greater labor force attachment, and earnings gains all took place despite the fact that the typical entry-level jobs for which they qualified are generally not considered "good" jobs in policy debates.

This study shows that work pays in more ways than one.

Carlos Bonilla
Chief Economist

About the Data

Data for this sample are drawn from the National Longitudinal Survey of Youth. The sample included all youths enrolled in high school who were age 16-19 in 1979.

Introduction

The tendency for teenagers to work in the paid labor force while attending high school has increased substantially in the past twenty years. Today, more than two-fifths (42.8%) of 16-19 year olds enrolled in school are also in the labor force, according to Department of Labor definitions[1]. Some of this, to be sure, is summer employment only, but nearly 90% of high school juniors and seniors in the National Survey of Families and Households who worked for pay for at least some period during the year also worked for at least part of the *school* year[2]. These high rates of labor force participation among school-enrolled youth are a "distinctly American phenomenon"[3] and have resulted from other large-scale social, economic, and psychological changes that have occurred in the United States over the past few decades. Chief among these has been the widespread shift from a manufacturing to a service economy, which has brought rather large growth in the number of minimum-wage, entry-level positions — positions highly suitable for high school students working part-time. From 1979 to 1987 (to illustrate), jobs in retail trade and personal services accounted for 84% of total job growth[4]; this trend has no doubt continued into the 1990s.

Is part-time work while in high school a good idea? What are the short- and long-term effects on educational attainment, employment, occupational attainment, and income? Does work during the high school years constitute a penalty or does it confer long-term rewards? Do the effects vary according to the type of student who works or to the number of hours or weeks worked? This paper addresses these and some related questions using a sample of high school students from the National Longitudinal Survey, Youth Supplement data (NLSY).

Certainly, there are reasons to expect that work during high school might confer both benefits and liabilities. On the downside, hours spent at work are hours not available for study or homework, and so there could well be negative effects on school performance and educational attainment, with subsequent, longer-term effects on adult occupational attainment and income. On the other hand, working while in high school might teach students better time management, foster maturation and independence, or confer other positive benefits. At the least, working while in high school adds some years of labor force experience and might therefore prove beneficial in subsequent employment, occupational attainment, or income.

---

[1] U.S. Bureau of the Census, *Statistical Abstract of the United States* (Washington, DC: U.S. Government Printing Office, 1991).

[2] Wendy Manning, "Parenting Employed Teenagers," *Youth and Society* 22 (1990): 184-200.

[3] Ellen Greenberger and Laurence Steinberg, *When Teenagers Work: The Psychological and Social Costs of Adolescent Employment* (New York: Basic Books, 1986).

[4] Lawrence Mishel and Jacqueline Simon, *The State of Working America* (Washington, DC: Economic Policy Institute, 1988); Joel A. Devine and James D. Wright, *The Greatest of Evils: Urban Poverty and the American Underclass* (Hawthorne, NY: Aldine de Gruyter, 1993).

Whatever the actual effects, adults express overwhelming approval of teen work.[5] Most parents evidently believe that working while in high school promotes independence, self esteem, greater responsibility, and better work habits. Adolescent work is also thought to result in better communication and smoother relationships with teenage children (which, as all parents of teenage children will confirm at once, is not a trivial benefit). Most parents also apparently believe that working while in high school leads to a greater appreciation of the value of education and better time management, and thus to better grades.[6] Of course, what parents believe to be true, and what actually is true, are not necessarily the same thing.

The highly positive attitude towards teen work among parents, the obvious interest of teenagers themselves in the acquisition of material things, and the ever-increasing opportunities for part-time jobs in the expanding service sector all point to continued increases in the number of high school students in the labor force.[7] Given this, there is a clear need for empirical evidence on the short- and long-term effects.

Data, Measures, Methods

Several prior studies have exploited the NLSY to address issues of teen employment. The NLSY initially enrolled a youth cohort in 1979 that has been followed more or less yearly ever since. Using the 1991 survey enabled an analysis of the effects of teen employment extending out more than a decade.

Here we analyze a subset of the 1979 youth cohort: that consisting of persons between ages 16 and 19 in 1979, who were enrolled in high school as of May 1, 1979, and who remained in the NLSY sample through to 1991. Thus, we exclude the 14-15 year old portion of the sample (very few of whom worked for pay in 1979) and the 20-22 year old portion of the sample (nearly all of whom were already out of high school and therefore not appropriate for this analysis); we also exclude any 16-19 year olds who had either completed high school by 1979 or had already dropped out; also excluded are any otherwise eligible cases that were lost to follow-up over the intervening 12 years (and for whom, perforce, no 1991 outcome data are available). With these exclusions, 2,716 youth remain for the analysis, out of the 12,686 youth initially enrolled in the 1979 youth supplement to the NLS. The youth that remain comprise a probability sample of 16-19 year old high school students in 1979.

The NLS youth supplement consists of three independent probability samples:

(1) a cross-sectional sample designed to be representative of the noninstitutionalized civilian segment of young people living in the United States in 1979 and born January 1, 1957 through December 31, 1964;

(2) a supplemental sample which oversamples civilian Hispanic, black, and economically disadvantaged non-Hispanic, non-black youth; and

---

[5] Jeylan T. Mortimer and Michael J. Shanahan, "Adolescent Work Experience and Family Relationships," 1991 Meeting of the International Society for the Study of Behavioral Development, Minneapolis, submitted for publication, *Work and Occupations* (December, 1992); H. W. Marsh, "Employment During High School: Character Building or Subversion of Academic Goals?" *Sociology of Education* 64 (1991): 172-189; Sarah Phillips and Kent L. Sandstrom, "Parental Attitudes Toward Youth Work," *Youth and Society* 22 (1990): 160-183; Ellen Greenberger and Laurence Steinberg (1986).

[6] Sarah Phillips and Kent L. Sandstrom (1990).

[7] Ellen Greenberger and Laurence Steinberg (1986).

3) a military sample designed to represent the population born January 1, 1957 through December 31, 1961 and serving in the military as of September 30, 1978.

Thus, the data derive from a disproportionate stratified probability sample and therefore require sample weights in order to remove the design disproportionalities. In order to recapture the correct demographic marginals, different sample weights are required for each survey year. All results reported in this paper are based on the **weighted** data using the 1991 sample weights.[8]

The 1979 survey obtains usefully detailed data on the work experience of high school students. We know not only whether they worked, but for those who did work, we also know the average number of hours worked per week, the number of weeks worked for the year, the type of job, the kind of business worked in, and the wage rate. In most of the following analysis, the work variable is represented by the number of weeks worked or the number of hours worked. In the 1979 data, 31% of the 16-19 year olds reported **no** weeks of work in the previous year; we refer to these as non-working youth in the following analysis. Thus, the substantial majority of the NLS youth cohort (69%) had at least some work experience during high school.

About 20% of the sample reported working between one and thirteen weeks in the previous year; these, most likely, are students with summer jobs but who do not work during the **school** year. Finally, 28% of the sample worked between 14 and 39 weeks and 22% worked forty weeks or more; we refer to these as the "moderate work" and "heavy work" groups, respectively. These groups are represented in the analysis as a series of dummy variables using the non-working group as the omitted category. We have taken this approach in *lieu* of entering weeks worked as a linear variate simply because the literature suggests a non-linear approach (*i.e.*, different effects for heavy vs. moderate work experience, or for summer-only vs. school-year work experience, etc.). As an alternative specification of high school work experience, we also use a variable indexing the total hours worked in the year.

Among all youth in this sample, the average number of weeks worked in the previous year was 19.5; the average hours worked per week was 17.9; students working more weeks also averaged more hours per week. Most of the working youth had had only a single job; the average number of total jobs ever held was 1.16.

As one would expect, the work experience of NLS youth varies with age, the younger students being more likely not to have worked at all. Thus, among 16-year-olds, 41% reported no weeks worked, compared to only 19% of the 18-year-olds. (Interestingly, 35% of the 19-year-olds in these data had not worked at all in the previous year, which we suspect reflects the relatively low employability of 19-year-olds who are still in high school.) At the other end of the distribution, 16% of the 16-year-olds but 31% of the 18-year-olds reported having worked 40 or more weeks.

Even in 1979, service work was the typical experience for working high school youth (40%). In addition, 32% were employed in various blue collar occupations and 28% were employed in white collar occupations. More than half of all teen jobs were in wholesale or retail businesses. Of those working during the survey week in 1979, 25% worked fewer than 10 hours, 33% worked 10-19 hours, 26% worked 20-29 hours, and 16% worked thirty hours or more.

---

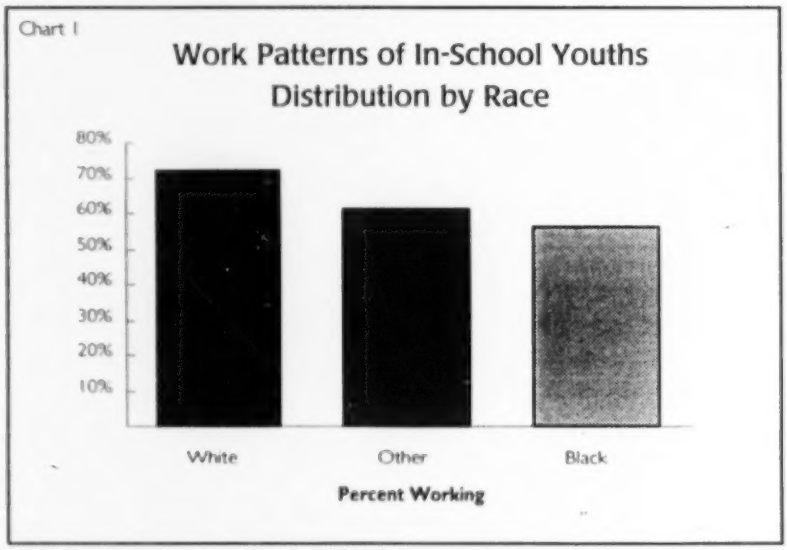
[8] To maintain the correct sample size and degrees of freedom, the 1991 weights were divided by the average 1991 weight for this sample. See Center for Human Resource Research, *NLS Users' Guide*, (Columbus, Ohio: The Ohio State University, 1993).

Reported earnings from wages and salaries in the 1979 interview among the working youth in the NLS cohort ranged from $0 to $24,500; the mean earnings were $1255, the median earnings were $880, and the mode was $1000. Earnings were, of course, strongly correlated with hours and weeks worked. Only 4.4% of the working students earned $4,000 or more, and 76% of those in this earning group worked 40 or more weeks; 1.2% of the working students reported no income at all from their efforts (which we presume to mean that they were working in an unpaid capacity in various family businesses and enterprises).

The 1991 survey wave provides a large number of possible outcome measures for examination. We focus here on school completion rates, labor force status, employment, income, and poverty status.

Work Experience of High School Youth: Descriptive Analysis

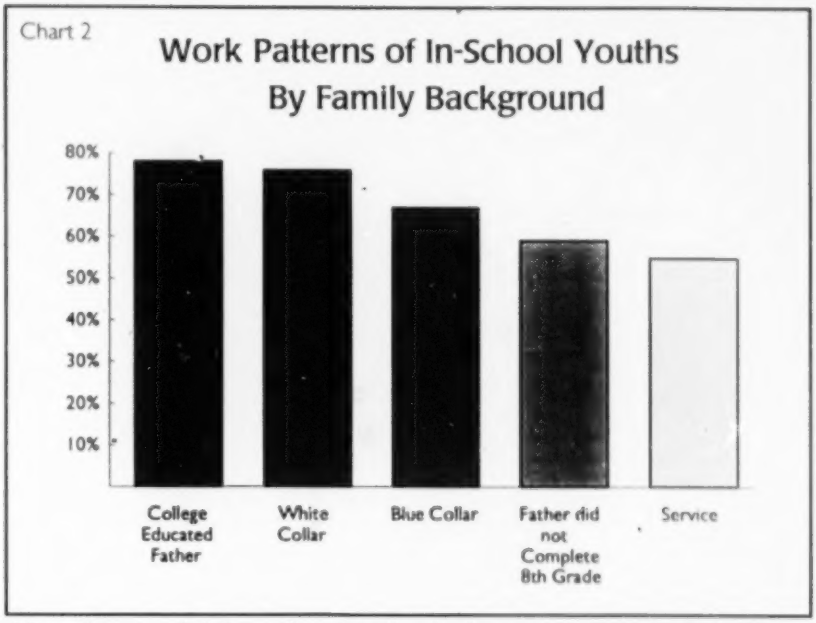
Students from different kinds of backgrounds vary in their high school labor force experience; it is critical to know the background factors that are correlated with the tendency to work while in high school since many of these factors will also be related to subsequent attainment. A descriptive analysis of who works in high school and who doesn't is therefore useful in revealing independent variables that need to be held constant in the analyses exploring long-term effects.



Working while in high school is related to race: 44% of the black students in the sample, 39% of the "others" (mostly Hispanics), but only 28% of the whites reported no weeks of work in the prior year. Girls were more likely to be non-workers (36%) than boys (26%); among males, 26% were heavy workers (40 or more weeks) vs. only 18% among females. Gender (and racial) differences were much smaller in the two intermediate work categories. There are also small but important differences by city size: among central-city teens, 38% worked no weeks in the previous year; among teens living outside the central cities, the figure was 28%. Aggregate rural-urban differences, however, were not statistically significant.

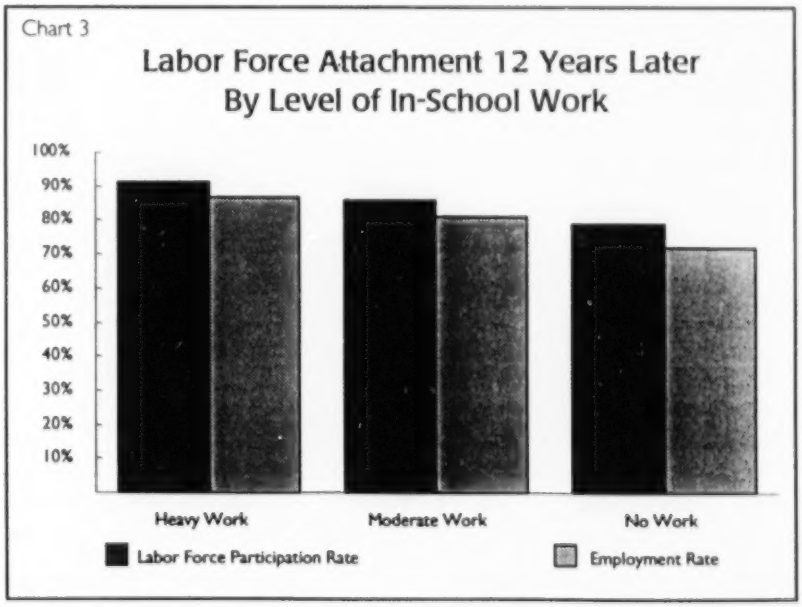
There are also sizable and unexpected differences in work experience according to family background variables. Students who lived with both parents at age 14 were more likely to work while in high school than students living with mothers only. The tendency to work while in high school also **increased** with all measures of parental education. To illustrate, 41% of the students whose parents had less than an eighth grade education had **no** work experience in the prior year; among those with college-educated fathers, only 22% had no work experience in the prior year. Also, among students working at all, the total weeks worked **increased** with parental education. In the same vein, students from families with one or more working adults were more likely to work themselves than students from families with unemployed or out-of-the-labor force parents. Thus, working teens come disproportionately from better-educated families with employed adults; this is equally true whether the measure is working vs. non-working or the total number of weeks worked.

Chart 2

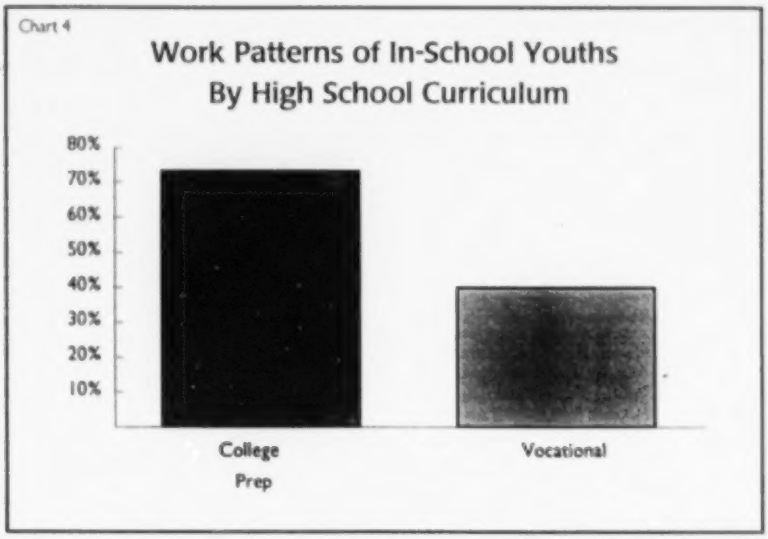


In the same vein, teenaged children of blue collar and service worker fathers were **less** likely to have worked than teenaged children of white collar workers; 33 percent of the children of blue collar workers and 45% of the children of service workers had not worked in 1978, compared to 24% of the children of white collar fathers. One fourth of the children of white collar fathers had worked over 40 weeks in the

Chart 3



past year; of those in poverty, only ten percent worked over 40 weeks compared with 24% of those not in poverty. In general, the higher the family income, the more likely the teenager is to work while in high school; family income is also positively associated with the total number of weeks worked.[9] Also, work experience was higher among teens from households who received reading material such as newspapers and magazines or who had library cards than in other households and was also higher among teens with fewer brothers and sisters.



Working was also associated with high school curricular track. Among youth enrolled in college preparatory tracks, only 27% had no work experience in the previous year, in comparison to 40% of those enrolled in commercial or business tracks. General attitudes towards school were not significantly correlated with number of weeks worked; students who liked school and those who did not were equally likely to be working. Patterns of labor force participation according to scores on a standardized aptitude test (the Armed Services Vocational Aptitude Battery, or ASVAB) were also revealing. Students scoring in the 90th to 100th percentile were much more likely to be working while in school than those scoring in the 29th percentile or below; among the former, only 18% had no work experience in the prior year, and among the latter, more than 40%. Among those working, score on the ASVAB was also positively associated with number of weeks worked.

The NLSY does not have particularly good data on early occupational aspirations. One possibly relevant question asks, "What would you like to be doing at age 35?" Marriage and family aspirations figured more prominently among high school girls than boys, but there was no statistically significant association between aspirations and any measure of work experience. Both working and non-working youth aspired to similar adult jobs. To the extent that this measure is adequate for the purpose, this result suggests that any differences in later achievement are not the result of differences in early aspirations.

In summary, students who work while they are in high school tend to be junior and senior white males from intact, relatively well-educated middle class families who are enrolled in college preparatory tracks and who are better-than-average students. (At the same time, these patterns are generally not sharp — they represent modest tendencies, not categorical differences.) Given these background characteristics, it is hard to imagine that they would somehow be

[9] Family income data are missing on about 20% of the total sample.

penalized for their early work experience later in life, although this remains an open empirical question to which we now turn.

Outcomes a Decade Later

1. Educational attainment and school completion. Persons aged 16-19 in 1979 are ages 28-31 by 1991 and most of them will have therefore completed whatever schooling they are ever going to complete (only 173 respondents, or 6% of the sample, reported being currently enrolled in college in the 1991 interview). We therefore regressed years of school completed as of 1991 on the teen work experience variables, holding constant relevant background characteristics (race, gender, parental education, ASVAB percentile score, and family poverty status in 1979). The results show that with relevant background factors held constant, the effect of teen work is indeed negative on educational attainment. The coefficient for "heavy work" while a student is -.26 and significant, that for "moderate work" is -.21 and significant, and that for summer-only work is -.01 but not significant. Thus, there is a definite negative effect of teen work on years of education completed amounting to about a quarter-year decrement for those working the most weeks in 1979. This confirms the findings of several previous studies and also suggests that the short-term educational decrement noted in prior literature does **not** disappear later in life. Working teens, that is, forego rather than delay this extra part-year of educational attainment.[10]

Although the effect is clearly negative and significant, it is not very large in absolute magnitude and could therefore be produced through any number of distinct processes. For example, working teens could be somewhat less likely than non-working teens to continue on to college after high school graduation. Or, they may be more likely to drop out of high school before graduation. If they attend college, they may be more likely to leave without completing a degree program and/or leave earlier than non-working teens. Each process has different implications for credentialling and overall human capital, and so it is critical to know which produces the aggregate educational effect reported above.

We explored this issue through a series of log-linear regressions using the educational "decision points" as dummy dependent variables (Table 1). The independent variables included the dummy variables for teenage work experience (with "no work" as the reference category) and also the students' race, gender, family poverty status in 1979, parents' educational attainment, and the ASVAB percentile score. Results of these logistic regressions were as follows:

For the regression (Model 1) predicting whether the student graduated from high school or dropped out, the effects were positive and statistically significant for being female, being black, and scoring well on the ASVAB. The effects of poverty status and parental education were in the predicted directions but not statistically significant. None of the teen work variables was significant either; the coefficient for heavy work was **positive** and those for moderate and summer-only work were **negative**, but none of the three were statistically distinguishable from zero. Thus, of these relevant background factors, the net result is that teen work does not significantly influence the probability that a student will graduate from high school. Model 2

[10] More accurately, they either forego the extra part-year entirely or seriously delay it until adulthood. Recent trends in college enrollment among "non-traditional" (*i.e.*, older) students implies that there is no definite age at or beyond which one can safely assume that people have obtained all the education they will ever obtain.

substitutes total hours worked for the weeks-of-work dummy variables; the coefficient is negative but small in magnitude and, again, not statistically significant.

We next examined the probability that students would make a decision to go to college contingent on having graduated from high school, using the same regressors as above. The

Table 1

The Effect of High School Work Experience on the Likelihood of Education Attained as of 1991: Logistic Regression

	Likelihood of completing 12th grade		Likelihood of completing 1 to 3 years of college		Likelihood of completing 4 or more years of college	
	Model		**Model**		**Model**	
	1	2	1	2	1	2
	b	b	b	b	b	b
	(SE b)	(SE b)	(SE b)	(SE b)	(SE b)	(SE b)
1979 Variables						
Female	.571**	.493*	.202*	0.123	.239+	0.159
	(0.194)	(0.201)	(0.102)	(0.104)	(0.139)	(0.142)
ASVAB %ile rank	.063***	.065***	.040***	.040***	.039***	.041***
	(0.006)	(0.007)	(0.002)	(0.002)	(0.003)	(0.004)
In poverty	-0.253	-0.33	0.145	0.221	-0.258	-0.248
	(0.227)	(0.231)	(0.172)	(0.174)	(0.288)	(0.292)
Black	.715**	.631**	1.082***	1.048***	0.357	.423+
	(0.238)	(0.241)	(0.164)	(0.165)	(0.243)	(0.245)
Other races	-0.353	-0.414	1.329***	1.252**	0.773	0.788
	(0.443)	(0.450)	(0.388)	(0.394)	(0.504)	(0.526)
Parents' education	0.04	0.029	.262**	.257***	.143***	.139***
	(0.034)	(0.035)	(0.024)	(0.024)	(0.030)	(0.031)
Weeks worked in 1978						
1-13 weeks	-0.152		0.107		0.083	
	(0.247)		(0.149)		(0.201)	
14-39 weeks	-0.16		-.259+		-.316+	
	(0.241)		(0.135)		(0.186)	
40 or more weeks	0.262		-.362*		-0.282	
	(0.291)		(0.146)		(0.200)	
% wks unaccounted for	0.005	0.004	0.003	0.004	0.002	0.004
	(0.005)	(0.005)	(0.003)	(0.003)	(0.004)	(0.004)
hours worked in '78		-0.049		-.115***		-.122**
		(0.044)		(0.026)		(0.038)
CONSTANT	0.028	0.279	-5.311***	-5.103***	-4.253***	-4.156***
	(0.405)	(0.414)	(0.325)	(0.326)	(0.463)	(0.468)
-2 Log Likelihood	846.937	807.668	2356.9	2286.514	1253.895	1212.351
N	2,377	2,301	2,184	2,116	1,013	987

Note: + = p < .10; * p =< .05; ** p =< .01; *** p= < .001 (one tailed test)

effects for being black and female were positive and significant; also of interest, the effect for being of "other race" (mostly Hispanics) was also positive and significant. In other words, among students who have graduated from high school, both blacks and Hispanics are more likely to continue on to college than white students **once** parental background and ASVAB percentile scores are held constant. Parents' education and ASVAB scores were also strongly positive and

Table 2

The Effect of High School Work Experience on the Likelihood of Being Out of the Labor Force in 1991: Logistic Regression (Youths aged 16-19 in 1979)

	Likelihood of being out of labor force			
	Model 1		Model 2	
	b	SE b	b	SE b
1979 VARIABLES:				
Female	1.860***	0.16	1.002***	0.215
ASVAB %ile rank	-.009**	0.003	-.010**	0.003
In poverty	0.318	0.195	0.303	0.196
Black	-0.041	0.199	0.007	0.2
Other races	0.32	0.376	0.316	0.378
Parents' education	0.041	0.029	0.037	0.029
Weeks worked in 1978				
1-13 weeks	-0.298	0.185	-0.296	0.186
14-39 weeks	-0.265	0.169	-0.249	0.171
40 or more weeks	-.447*	0.2	-.436*	0.201
% wks unaccounted for	0.003	0.003	0.002	0.003
1991 VARIABLES:				
Highest grade completed:				
12th grade	-.646**	0.243	-.648**	0.244
1-3 years college	-.929***	0.28	-.925**	0.281
4 or more yrs college	-1.726***	0.336	-1.721***	0.336
Currently in college	0.402	0.26	.463+	0.264
Married	.307*	0.141	-1.044***	0.309
Female * Married			1.786***	0.348
CONSTANT	-2.387***	0.406	-1.766***	0.415
-2 Log Likelihood	1545.169		1515.865	
N	2374		2374	

Note: + = p < .10; * p =< .05; ** p =< .01; *** p= < .001 (one tailed test).

significant predictors of the decision to go on to college. Finally, the coefficient for heavy work experience while in high school was both **negative** and statistically significant, that for moderate work experience was **negative** and of borderline significance, and the effect for summer work only was positive but not significant. When hours worked is substituted for the weeks-of-work variables, the coefficient is **negative** and strongly significant. Thus, high school students who also work are not significantly less likely to graduate from high school, but given that they have graduated, they **are** less likely to continue on to college. The high-school-to-college decision point accounts in large part for the zero-order educational decrement reported above.

Finally, among students who continue on to college, what factors predict whether they will complete their college degrees[11]? In these analyses, ASVAB test scores and parental education are significant and positive predictors. The coefficient for the moderate work variable is negative and nearly significant; the coefficient for heavy work is negative but not significant; the coefficient for summer-work-only is positive but also not significant. However, when we substitute hours for weeks of work, we find that the coefficient is negative and statistically significant. Thus, students who work in high school are somewhat less likely to go on to college than those who do not work; among those who do continue in college, working students are somewhat less likely to complete four years.

By far the most negative observable effect of early teen work is therefore the effect on not continuing on to college, or once there, not completing four or more years. Given the effects of family income on teen work behavior (on average, working teens coming from more affluent families), it is unlikely that the decision not to go to or complete college is resource-driven. Likewise, given the interaction betwen ASVAB scores and teen work behavior (students with higher ASVAB scores are more likely to be working), it is unlikely that the decision not to go to or complete college is a function of differential qualifications for college work. By default, one must therefore consider that these decisions reflect a rational choice among working students that immediate entry into the labor force after high school graduation is economically and personally more advantageous than pursuing a college diploma.

Up through the early 1970s, a decision to continue on to college was probably economically rational for nearly anyone with the talent and resources to do so. But in the early and mid-1970s, much was beginning to be said and written about the glut of over-educated labor in the American market.[12] By the end of the 1970s, when the NLSY cohort was beginning to graduate from high school, it was reasonably obvious to all that college was no longer the certain route to success that it had once been. Many college graduates were going without work or being forced to work in jobs well beneath their aspirations and potential. The concept of "over-education" entered the vocabulary of American economic problems. Indeed, Hamilton and Wright reported in 1981 that about a quarter of the nation's blue collar (factory) workers had one or more years of college or university education. By the end of the decade, it was therefore no longer a foregone conclusion that talented and industrious high school students would automatically continue their education in college; for the first time in at least a half century (since the advent of mass public higher education), immediate entry into the labor force would have been an attractive and sensible alternative for many, and especially for those with some years of labor force experience (and perhaps an inside track on a good job) already.

As we have already stated, previous studies have documented the generally positive effects of teen employment on the early occupational career; students who worked in high school have higher rates of labor force participation, work more weeks and hours, and earn higher wages in the first three to five years after school completion than teens who did not

---

[11] The variable used here indicates whether the respondent has completed four or more years of college, which is not exactly the same as having graduated from college.

[12] See, *e.g.*, Ivar Berg, *Education and Jobs: The Great Training Robbery* (New York: Praeger, 1970); Richard Freeman, *The Over-Educated American* (New York: Academic, 1976); Richard F. Hamilton and James D. Wright, "The College Educated Blue Collar Worker," in R. Simpson and I. Simpson (eds.) *Research in the Sociology of Work: A Research Annual* (Greenwich, CT: JAI Press, 1981), 285-335.

work. Nearly all analysts who have reported these findings, however, have cautioned that these benefits may be short-lived and more than offset by the long-term negative effects of lower educational attainment. We have confirmed that working teens do have lower educational attainments in the aggregate and we have presented evidence to show the exact nature of the effect. We now turn to an examination of the long-term (twelve year) economic and labor force consequences.

2. Labor force participation, occupations, and income. The generally positive effects of teen employment on labor force participation as reported in prior studies are **not** just short-term benefits; they are easily discerned a dozen years later. In 1991, 87% of the students who

Table 3

The Effect of High-School Work Experience on the Likelihood of Being in the Labor Force and Employed in 1991: Logistic Regression. (Youths age 16-19 in 1979)

Likelihood of being in the labor force and employed in 1991

	Model 1		Model 2		Model 3	
	b	SE b	b	SE b	b	SE b
1979 VARIABLES						
Female	.399*	0.194	0.302	0.239	.694**	0.245
ASVAB %ile rank	-.001*	0.005	-0.001	0.005	-0.001	0.005
In poverty	-0.209	0.249	-0.208	0.249	-0.205	0.249
Black	-.500*	0.247	-.493*	0.247	-0.192	0.306
Other races	-0.489	0.511	-0.491	0.512	0.51	0.945
Parents' education	.077*	0.036	.077*	0.036	.077*	0.036
Weeks worked in 1978						
1-13 weeks	0.195	0.247	0.198	0.247	0.181	0.247
14-39 weeks	0.264	0.237	0.268	0.237	0.271	0.238
40 or more weeks	.724*	0.293	.727*	0.293	.722*	0.294
% wks unaccounted for	0	0.005	0	0.005	0	0.005
1991 VARIABLES:						
Highest grade completed:						
12th grade	0.02	0.358	0.02	0.358	-0.001	0.359
1-3 years college	0.067	0.402	0.07	0.402	0.045	0.405
4 or more yrs college	0.161	0.443	0.163	0.443	0.142	0.445
Married	.945***	0.195	.850***	0.237	.936***	0.195
Female * married			0.275	0.405		
Female * black					-.787+	0.434
Female * other races					-1.813	1.12
CONSTANT	1.080*	0.532	1.108*	0.534	.992+	0.534
-2 Log Likelihood	923.263		922.795		917.657	
N	2024		2024		2024	

Note: + = p < .10; * p =< .05; ** p =< .01; *** p= < .001 (one tailed test).

had had heavy work commitments in 1979 were employed, 4% were unemployed, and the remainder (9%) were out of the civilian labor force. Patterns among those with moderate work commitments in 1979 were similar: 81% employed, 5% unemployed, and 14% not in the civilian labor force. In contrast, the figures for those with no work experience in 1979 were 72% employed, 7% unemployed, and 21% not in the civilian labor force. (These differences are statistically significant; Chi-squared = 56.15 with 9 degrees of freedom.) Thus, persons who worked during high school are more likely than those who did not to be in the labor force twelve years later, and given that they are in the labor force, more likely to be employed (vs. unemployed).

Persons with high school work experience also worked more weeks in 1991, and averaged more hours of work per week worked, than persons without high school work experience. Again, the effects are relatively large and statistically significant. Among those with no 1979 high school work experience, 14% worked no weeks in 1991 and 50% worked the entire year; the corresponding figures for those with 40 or more weeks of work in 1979 are 6% and

Table 4

Unstandardized Regression Coefficients for the Relationship Between Wages and Salaries in 1990 and Selected Independent Variables. (Youths aged 16-19 in 1979)

	Model 1		Model 2	
	b	SE b	b	SE b
1979 VARIABLES:				
Female	-3793.659***	579.251	-6512.279***	578.986
ASVAB %ile	72.469***	13.683	66.192***	14
In poverty	-60.319	915.531	-725.861	935.335
Nonwhite	38.205	850.478	-7.185	874.848
Parents' education	285.022*	116.528	218.812+	119.75
Weeks Worked in 1978				
1-13 weeks	-219.858	804.041	-55.528	826.284
14-39 weeks	1098.401	744.427	1307.568+	763.664
40-52 weeks	1184.307	791.108	1585.148+	813.26
% wks unaccounted '78	5.118	15.237	4.372	15.592
1991 VARIABLES:				
Highest grade completed	1538.725***	161.305	1731.280***	165.084
In labor force and employed	2869.948*	1158.652	2501.506*	1194.395
# of wks worked '90			438.531***	21.991
# of hours worked '90	8.672***	0.367		
% wks unaccounted '90	93.828*	38.941	125.970**	40.243
Married	1945.962***	569.489	1763.185**	585.012
CONSTANT	-26281.128***	2300.952	-29187.734***	2415.036
R^2	0.398		0.354	
N	1,972		2,000	

Note: + = p < .10; * = p < .05; ** = p < .01; *** = p < .001 (one tailed test)

66%. (Results for the other two categories of high school workers are intermediate between these two extremes.) Similar differences were observed for hours worked in the week preceding the 1991 survey. Accordingly, there were also fairly substantial differences in personal wage and salary income. About a third (34.7%) of persons who worked no weeks in 1979 earned $20,000 or more in 1990, whereas more than half (53.9%) of those with heavy work commitments in 1979 were at or above the $20,000 mark in 1990. Thus, in the aggregate, the zero-order labor force effects of early work experience remain strong, positive, and significant even twelve years later, despite the small decrement in educational attainment.

Again, to control for possible confounding influences, we undertook multivariate analyses of several of these outcomes (Tables 2 - 4). In the case of binary outcomes (in or out of the labor force, employed vs. unemployed, in or out of poverty in 1991) we used logistic regressions; and in the case of continuous outcomes (income) we used ordinary least squares. Control variables include poverty status in 1979, parental education, respondent's education, race, gender, ASVAB scores, and respondent's marital status in 1991. The dummy variables representing high school work experience were also entered, of course. Results were as follows:

Holding relevant background factors constant (Table 2), high school work experience was negative in its effect on being **out** of the labor force in 1991 (indicating that those with high school work experience were **more likely** to be in the labor force), but only the effect for heavy work commitment was statistically significant. Among those in the labor force in 1991 (Table 3), the effects of high school work on being employed (vs. unemployed) were positive but, as above, only the effect for heavy work was statistically significant ($b = .72$, $p = .01$). Thus, there are marginally positive effects of high school work experience on both labor force participation and employment twelve years later, but the effects are only significant for those with the heaviest high school work experience. (There were no significant differences in models run with hours worked substituted for weeks worked as regressors).

We also examined two economic outcomes: family poverty status in 1991 and personal wage and salary income in 1990. Concerning the first, and with other factors held constant, the effect of high school work experience was negative in all cases (i.e., those with high school work experience of all three sorts were **less** likely to be in poverty twelve years later) but significant in none.

Concerning the effects on personal income (Table 4): Model 1 examines the effects of high school work experience holding hours worked **in 1990** constant. Gender, education, and hours worked dominate this model; the effects of high school work experience, while positive, are not significant. Model 2 drops the control for hours worked in 1990 and adds a control for weeks worked in 1990; in this model and net of all other factors, the coefficient for heavy high school work experience is positive, substantial in magnitude, and nearly significant ($p = .051$) at the 5 percent level. In absolute terms, net of all other factors, those with heavy work experience in high school averaged $1,585 more income in 1990 than those with no high school work experience; the effect for moderate work experience was also positive, at the edge of statistical significance ($p = .087$), and also substantial in magnitude ($1,308). Thus, the generally positive zero-order economic effects reported earlier also hold up in the face of statistical controls. (Similar results were obtained in both the poverty and income regressions when hours worked in 1978 was substituted for weeks worked as regressors in these models.) That the high school work variables are more consequential in the second model than in the first suggests that hours

worked is the key intervening variable; that is, students who worked while in high school tend to earn more money twelve years later mainly because they also work more hours.

Conclusion

Teen work is a growing trend that is likely to continue into the next century. Previous research shows that the short-term effects are mixed, that is, positive in some cases and negative in others. The same may now be said for the long-term (twelve years later) effects; there is a small but statistically discernable negative effect of teen work on educational attainment, but somewhat larger and statistically significant positive effects on labor force participation, employment, and (to a lesser extent) income. The fear expressed by many analysts, that positive short-term labor force gains may be offset by larger losses later, appears misplaced.

Opinion research shows that teen work is approved and encouraged by adults, especially in middle class families; we have also confirmed that teen workers tend to come from white, relatively well-educated middle class families. Given their origins, one would not normally expect severe long-term penalties for high school work, and indeed, with the exception of the education decrement, no such penalties are observed in these data. It is certainly possible that significant penalties will surface later, perhaps at mid-career when earnings tend to peak, but the labor force effects in the early career (through the end of the sample's twenties) are consistently positive.

For a variety of reasons, the economic value of a college education has been declining now for about two decades. The sample of youth analyzed here were graduating from high school near the front end of this trend. Whether the disproportionate tendency of working high school students to enter the labor force directly after high school graduation rather than continue on to college will eventually come back to haunt them remains an open question, but as the economic value of a college education continues to decline, this is not nearly as significant a concern as it would have been two or three decades ago. Still, even though the value of college has declined, it is still overwhelmingly positive, and so the possibility of future penalties for high school workers remains real. At the twelve-year mark, however, the gains in labor force participation, employment, and income would appear to offset handsomely any losses due to the small educational decrement reported here.

PRIOR LITERATURE

Previous studies of the effect of working while in high school have focused principally on the short-term consequences for school completion; the results of this research are mixed and contradictory.[13] Mortimer and Finch[14] analyzed data from the Youth in Transition survey and reported that working during high school had **negative** consequences for educational attainment (as measured by grade point average, education aspirations, and total years of schooling completed) but **positive** consequences for early career attainment (employment, income). These authors surmise that the gains with respect to income in the early working years may be short lived but present no direct evidence on the point, since this research only covers the initial five-year period after high school completion.

In contrast to the patterns reported from the Youth in Transition data, D'Amico[15] analyzed data from National Longitudinal Survey of Youth (the same data as employed in this paper) and found **no** detrimental effects of employment during the high school years on educational performance (as indexed by class rank) either in the total sample or for any race-by-sex subgroup. In fact, working while in high school was associated with **improved** class standing for white males (but not for black males or females of either race). Work involvement also appeared to boost "knowledge-of-work" scores for females of both races but not males.[16] Further analysis showed that the detrimental effects of high school employment reported in earlier research resulted mainly from very intensive work involvement among students (*i.e.*, were only observed among students working inordinately large numbers of hours); among students working fewer hours, the effects were mostly beneficial (or insignificant). Among other things, these results illustrate the need to consider the nature as well as the fact of teen work in estimating its consequences.

Contrasting the generally positive findings reported by D'Amico, Steinberg and Dornbusch studied California high school students and reported that "in no groups [*i.e.*, whites, blacks, Asians, or Hispanics] are the correlates of employment positive, in terms of lower rates of dysfunctional behavior, better school performance, or enhanced psychological well being"[17]. To say that the effects were not positive, however, is not to imply they were resolutely negative. For most outcomes in this particular study, the effects of high school work were small. This, however, is not true of the study by Marsh[18], who found that hours worked during high school had a significantly negative effect on 16 of 22 academic outcomes, including overall grades,

---

[13] See, *e.g.*, Lauri Steel, "Early Work Experience Among White and Non-White Youths: Implications for Subsequent Enrollment and Employment," *Youth and Society* 22 (1991): 419-447; Laurence Steinberg and Sanford M. Dornbusch, "Negative Correlates of Part Time Employment During Adolescence: Replication and Elaboration," *Developmental Psychology* 27 (1991), 304-313; Jeylan T. Mortimer and Michael D. Finch, "The Effects of Part Time Work on Adolescent Self Concept and Achievement," in Kathryn M. Borman and Jane Reisman (eds.) *Becoming a Worker* (Norwood, NJ: Ablex Publishing Company, 1986); Ronald D'Amico, "Does Employment During High School Impair Academic Progress?" *Sociology of Education* 57 (1984): 152-164.

[14] Mortimer and Finch *ibid.*

[15] Ronald D'Amico (1984).

[16] "Knowledge of work" scores index a student's understanding of what various kinds of jobs and work entail, i.e., what does it mean to be a hospital orderly, department store buyer, key punch operator, etc. It is a crude measure of the sophistication students bring with them in their initial entry into the adult work force.

[17] Laurence Steinberg and Sanford M. Dornbusch (1991), 313.

[18] H. W. Marsh (1991).

hours spent on homework, and getting into trouble both in school and out. Marsh[19] and also Mortimer, Shanahan, and Ryu[20] add a further specification to this result; in both these studies, hours worked in the 9th and 10th grades were *not* negatively related to grades or homework time, but hours worked during the 11th and 12th grades were. Since the work measure employed here is hours worked, this result does not reflect only that 11th and 12th graders work more hours; a more plausible explanation is that the intellectual demands of the 11th and 12th grade curriculum are higher and thus that hours worked for pay in the latter years of high school impact more negatively on academic performance.

In addition to the effects on academic performance and school completion, several studies have examined the impact of high school work experience on post-graduation employment rates and wages[21]. Again, the focus is typically on the short term (*i.e.*, the first four or five years after high school) but the results are consistently positive. That is, despite mixed or negative effects on educational attainment, working while in high school has generally positive effects on employment and income at least in the short run.

Meyer and Wise[22] analyzed early data from the National Longitudinal Survey of 1972 High School Seniors and found a relatively strong association between hours worked in high school and weeks worked per year in the subsequent four years. They also reported a moderate but significant relationship between high school work and subsequent hourly wage rates. Thus, in the first four years after high school, students who worked while in high school worked more than those who did not, and at somewhat higher wages. Mortimer and Finch[23] found similar relationships in the Youth in Transition study. They caution, however, that these significant short-term benefits could well be offset by long-term losses resulting from less commitment to school performance and lower aspiration to continue educational pursuits.

Steel[24] also analyzed National Longitudinal Survey of Youth data and found that white youths generally benefit from having worked in high school. In these data, employment while in high school was positively associated with continued school enrollment for white youth of both genders, especially for students working low to moderate numbers of hours. White and non-

---

[19] *ibid.*

[20] Jeylan T. Mortimer, Michael Shanahan, and Seongryeol Ryu, "The Effects of Adolescent Employment on School Related Orientation and Behavior," International Conference on the Development of Motivational Systems in Adolescence: Interindividual Differences and Contextual Factors in Interaction, Marburg, Germany, May 8-11, 1991, forthcoming in Rainer K. Silbereisen and Eberhard Todt (eds.) *Adolescence in Context: The Interplay of Family, School, Peers and Work in Adjustment* (New York: Springer).

[21] Lauri Steel (1991); David Stern and Yoshi-Fumi Nakata, "Characteristics of High School Students' Paid Jobs, and Employment Experience After Graduation," in David Stern and Dorothy Eichorn (eds.) *Adolescence and Work: Influences of Social Structure, Labor Markets and Culture* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1989), 189-233; Mortimer and Finch (1986); Robert H. Meyer and David A. Wise, "High School Preparation and Early Labor Force Experience," in Richard B. Freeman and David A. Wise (eds.) *The Youth Labor Market Problem: Its Nature, Causes and Consequences* (Chicago: The University of Chicago Press, 1981), 277-347; Stanley P. Stephenson, "In School Labour Force Status and Post-School Wage Rates of Young Men," *Applied Economics* 13 (1981): 279-302.

[22] Robert H. Meyer and David A. Wise, "High School Preparation and Early Labor Force Experience," in Richard B. Freeman and David A. Wise (eds.) *The Youth Labor Market Problem: Its Nature, Causes and Consequences* (Chicago: The University of Chicago Press, 1981), 277-347.

[23] Mortimer and Finch, *op cit.*

[24] Lauri Steel, "Early Work Experience Among White and Non-White Youths: Implications for Subsequent Enrollment and Employment," *Youth and Society* 22 (1991): 419-447.

white males working close to full time, however, were more likely to leave school (but were also more likely subsequently to be employed). Like Mortimer and Finch, Steel[25] cautions against an overemphasis on short term gains and counsels that a final assessment of the possible value of early work experience needs to take into account not only the various ways that youth might benefit from such experiences but also what the alternatives might be and their implication for development and attainment among the young.

Stern and Nakata[26] also analyzed the NLSY data and found that juniors and seniors working larger numbers of hours per week experienced **less** unemployment and **higher** hourly earnings in the first three years after graduation. They also found that recent high school graduates whose senior jobs gave them more opportunity to exercise and improve their skills in dealing with people, things, or data earned high wages (again in the first three years) and spent less time looking for work.

Thus, the results of previous research suggest that while working in high school may be marginally detrimental to academic performance and school completion, it is marginally to significantly beneficial for the early working career. (Few previous studies have examined consequences for a time window greater than four or five years and so it is not known whether the apparently positive employment and earnings effects persist over the longer term.)

Finally, there are a few studies that have examined outcomes of early work experience in areas other than education and employment. For example, Ianni[27] found that working while in high school diminishes family interaction and parent-adolescent relationships. On the other hand, Mortimer and Shanahan[28] found no evidence that working teens had poorer relationships with their parents than non-working teens. Ruggiero[29] and Greenberger and Steinberg[30] have reported that working while in high school may lead to an increase in certain forms of nonviolent (and relatively benign) deviant behavior among middle class youth.

We ask again, is part-time work while in high school a good idea or not? The available research literature provides no clear answer to this question. Possible negative effects on schooling are apparently offset to some degree by possible positive effects on employment and income, but it is not known whether any of these effects persists for more than a few years. Likewise, possible negative effects on parent-teen interaction and relationships are offset to some degree by overwhelming approval among adults of teens working while they are in high school. It is evidently insufficient to know just whether teens work for pay or not; the hours and weeks that they work, and the kinds of jobs they have, are more consequential in most studies than the

---

[25] Lauri Steel, "Early Work Experience Among White and Non-White Youths: Implications for Subsequent Enrollment and Employment," *Youth and Society* 22 (1991): 419-447.

[26] David Stern and Yoshi-Fumi Nakata, "Characteristics of High School Students' Paid Jobs, and Employment Experience After Graduation," in David Stern and Dorothy Eichorn (eds.) *Adolescence and Work: Influences of Social Structure, Labor Markets and Culture* (Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1989), 189-233.

[27] F.A.J. Ianni, *The Search for Structure: A Report on American Youth Today* (New York: Free Press, 1989). Similar results have been reported by Steinberg and Dornbusch (1989), Greenberger and Steinberg (1986) and Manning (1990).

[28] Jeylan T. Mortimer and Michael J. Shanahan (submitted for publication, 1992).

[29] Mary Ruggiero. 1984. Work as an Impetus to Delinquency: An Examination of Theoretical and Empirical Connection. Unpublished doctoral dissertation, University of California, Irvine.

[30] Ellen Greenberger and Laurence Steinberg (1986).

simple matter of working or not working. What is clearly needed is a data resource for a nationally representative sample of youth that contains (1) some detail on the amount and nature of high school work experience, (2) outcome measures such as educational attainment, school completion, work history, incomes, and other factors, and (3) follow-up data extending out for more than the first few years.

REFERENCES

Berg, Ivar. 1970. *Education and Jobs: The Great Training Robbery*. New York: Praeger.

D'Amico, Ronald. 1984. "Does Employment During High School Impair Academic Progress?" *Sociology of Education* 57:152-164.

Devine, Joel A., and James D. Wright. 1993. *The Greatest of Evils: Urban Poverty and the American Underclass*. Hawthorne, NY: Aldine de Gruyter.

Freeman, Richard. 1976. *The Over-Educated American*. New York: Academic.

Greenberger, Ellen and Laurence Steinberg. 1986. *When Teenagers Work: the Psychological and Social Costs of Adolescent Employment*. New York: Basic Books.

Hamilton, Richard F., and James D. Wright. 1981. "The College Educated Blue Collar Worker." Pp. 285-335 in R. Simpson and I. Simpson (eds.), *Research in the Sociology of Work: A Research Annual*. Greenwich, CT: JAI Press.

Ianni, F.A.J. 1989. *The Search for Structure: A Report on American Youth Today*. New York: Free Press.

Manning, Wendy. 1990. "Parenting Employed Teenagers." *Youth and Society* 22:184-200.

Marsh, H. W. 1991. "Employment During High School: Character Building or Subversion of Academic Goals?" *Sociology of Education* 64:172-189.

Meyer, Robert H. and David A. Wise. 1981. "High School Preparation and Early Labor Force Experience." Pp. 277-347 in *The Youth Labor Market Problem: Its Nature, Causes and Consequences*, edited by Richard B. Freeman and David A. Wise. Chicago: The University of Chicago Press.

Mishel, Lawrence, and Jacqueline Simon. 1988. *The State of Working America*. Washington, DC: Economic Policy Institute.

Mortimer, Jeylan T. and Michael D. Finch. 1986. "The Effects of Part Time Work on Adolescent Self Concept and Achievement," in Kathryn M. Borman and Jane Reisman (eds.), *Becoming a Worker*. Norwood, NJ: Ablex Publishing Company.

Mortimer, Jeylan T. and Michael J. Shanahan. 1992. "Adolescent Work Experience and Family Relationships." 1991 Meeting of the International Society for the Study of Behavioral Development, Minneapolis. Submitted for publication, *Work and Occupations*, (December, 1992).

Mortimer, Jeylan T., Michael Shanahan, and Seongryeol Ryu. 1991. "The Effects of Adolescent Employment on School Related Orientation and Behavior." International Conference on the Development of Motivational Systems in Adolescence: Interindividual Differences and Contextual Factors in Interaction. Marburg, Germany. May 8-11, 1991. Forthcoming in Rainer K. Silbereisen and Eberhard Todt (eds.), *Adolescence in Context: The Interplay of Family, School, Peers and Work in Adjustment*. New York: Springer.

NLS Users' Guide. 1993. Center for Human Resource Research. Columbus, Ohio: The Ohio State University.

Phillips, Sarah and Kent L. Sandstrom. 1990. "Parental Attitudes Toward Youth Work." *Youth and Society* 22:160-183.

Ruggiero, Mary. 1984. Work as an Impetus to Delinquency: An Examination of Theoretical and Empirical Connection. Unpublished doctoral dissertation, University of California, Irvine.

Steel, Lauri. 1991. "Early Work Experience Among White and Non-White Youths: Implications for Subsequent Enrollment and Employment." *Youth and Society* 22:419-447.

Steinberg, Laurence and Sanford M. Dornbusch. 1991. "Negative Correlates of Part Time Employment During Adolescence: Replication and Elaboration." *Developmental Psychology* 27:304-313.

Stephenson, Stanley P. 1981. "In School Labour Force Status and Post-School Wage Rates of Young Men." *Applied Economics* 13:279-302.

Stern, David and Yoshi-Fumi Nakata. 1989. "Characteristics of High School Students' Paid Jobs, and Employment Experience After Graduation." Pp. 189-233 in David Stern and Dorothy Eichorn (eds.), *Adolescence and Work: Influences of Social Structure, Labor Markets, and Culture*. Hillsdale, NJ: Lawrence Erlbaum Associates.

U.S. Bureau of the Census. 1991. *Statistical Abstract of the United States*. Washington, DC: U.S. Government Printing Office.

BIOGRAPHIES

James D. Wright is the Favrot Professor of Human Relations in the Department of Sociology at Tulane University. He has written extensively on crime, poverty, homelessness, and education. He is the author of over a dozen books and more than 90 articles in professional journals. Prior to assuming his post at Tulane he was a full professor at the University of Masschusetts, Amherst.

Rhoda Carr has just received her Ph.D. in sociology from Tulane University.

RECENT PUBLICATIONS

Employment Policies Institute Foundation

The Effects of Minimum Wages on Teenage Employment, Enrollment, and Idleness, by David Neumark, Michigan State University, August 1995.

Understanding the Minimum Wage: Issues and Answers. A landmark guide to the issues surrounding the minimum wage. Employment Policies Institute Foundation, July 1995.

Youth Employment in the Hospitality Sector, by Bradley Schiller, School of Public Affairs, American University, June 1995.

The Consequences of Indexing the Minimum Wage to Average Wages in the U.S. Economy, by David Macpherson, Florida State University, and William Even, Miami University, May 1995.

Earnings Growth and Employment Stability of Workforce Entrants: Does the Point of Entry Matter? by Frederick J. Tannery, University of Pittsburgh and Slippery Rock University, April 1995.

Jobs Taken by Mothers Moving from Welfare to Work: And the Effects of Minimum Wages on this Transition, by Peter D. Brandon, Institute for Research on Poverty, University of Wisconsin -- Madison, February 1995.

Minimum Wage Laws and the Distribution of Employment, by Kevin Lang, Boston University, January 1995.

The Low-Wage Workforce. Statistical analysis of the low-wage workforce from the 1992 *Current Population Survey*, December 1994.

The Effects of High School Work Experience on Future Economic Attainment, by Christopher J. Ruhm, University of North Carolina at Greensboro, May 1994.

The Early Careers of Non-College-Bound Men, by Jeff Grogger, University of California, Santa Barbara, May 1994.

Effects of the Employer Mandate in the Clinton Health Plan, by June E. O'Neill and Dave M. O'Neill, Baruch College, City University of New York, March 1994.

The Effect of Recent Increases in the U.S. Minimum Wage on the Distribution of Income, by John T. Addison and McKinley Blackburn, University of South Carolina at Columbia, March 1994.

Public Policies for the Working Poor: The Earned Income Tax Credit vs. Minimum Wage Legislation, by Richard V. Burkhauser, Syracuse University, and Andrew J. Glenn, Vanderbilt University, March 1994.

The Impact of a Health Insurance Mandate on Labor Costs and Employment, by June E. O'Neill and Dave M. O'Neill, Baruch College, City University of New York, September 1993.

Health Insurance Benefits and Income Support for Poor Families: Report on National Survey of Leading Economists. Conducted by the University of New Hampshire Survey Center, this survey presents overwhelming agreement among economists on the effects of mandated health insurance or a higher minimum wage, June 1993.

The Minimum Wage and the Employment of Teenagers: Recent Research, by Bruce Fallick, University of California–Los Angeles, and Janet Currie, Massachusetts Institute of Technology, June 1993.

The Employment Effect in Retail Trade of a Minimum Wage: Evidence from California, by Lowell J. Taylor, Carnegie Mellon University, June 1993.

Employment Effects of Minimum and Subminimum Wages: Recent Evidence, by David Neumark, University of Pennsylvania, February 1993.

EMPLOYMENT POLICIES INSTITUTE FOUNDATION
607 14th Street, N.W. • Suite 1110 • Washington, D.C. • 20005 • (202) 347-5178